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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,007	09/25/2006	Shinya Fukuoka	046262-0139	8860

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FOLEY AND LARDNER LLP  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER
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LU, ZHIYU

ART UNIT	PAPER NUMBER
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2618

MAIL DATE	DELIVERY MODE
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09/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,007	<b>Applicant(s)</b> FUKUOKA, SHINYA	
	<b>Examiner</b> ZHIYU LU	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-21 is/are allowed.
- 6) ☒ Claim(s) 22, 23 and 25-30 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 2618

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Forster et al. (US Patent#6646555).

Regarding claim 28, Foster et al. anticipate a mobile terminal device (130 of Fig. 1) comprising:

a first radio communication unit that performs a radio communication to detect an approach of an external device (column 1 line 63 to column 2 line 27); and

an attracted unit that is attracted to an attraction force generated by the external device (column 2 lines 24-27, column 7 lines 14-18, where the magnetic surface portion 162 of the automobile also has an attractive force toward the magnet 200).

Regarding claim 30, Foster et al. anticipate the limitation of claim 28.

Foster et al. anticipate wherein the first radio communication unit is a radio tag (130 of Fig. 1).

Art Unit: 2618

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Forster et al. (US Patent#6646555) in view of Oba et al. (US2004/0259499) and Rodgers et al. (US2002/0033757).

Regarding claim 29, Forster et al. teach the limitation of claim 28.

But, Forster et al. do not expressly disclose further comprising: a second radio communication unit that performs a radio communication with the external device by using a frequency band more expanded than a unit frequency band, in a state in which a transmission power per unit frequency band is set to be lower than a predetermined value.

Oba et al. teach a mobile terminal device (52 of Fig. 6) carries a RFID communication device and a Bluetooth communication device (Fig. 6).

Rodgers et al. teach a radio communication unit that performs a radio communication with the external device by using a frequency band more expanded than a unit frequency band, in a state in which a transmission power per unit frequency band is set to be lower than a predetermined value (paragraphs 0082-0083), where obviously spreading transmission power over a plurality of frequency bands would lower average transmission power.

Art Unit: 2618

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate having two radio communication units taught by Oba et al. and limiting average transmission power on each frequency band taught by Rodgers et al. into the mobile terminal device of Forster et al., in order to provide extra communication capability with power efficiency.

3. Claims 22-23 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cyrus et al. (US Patent#6322415) in view of Dort (US2004/0260455).

Regarding claim 22, Cyrus et al. teach a stationary information device comprising:

a detecting unit that detects the approach of the external device (column 2 lines 3-6); and  
an attracting unit that generates, when the detecting unit detects the approach of the external device, an attraction force for attracting and fixing the external device (column 2 lines 10-17, where the electromagnetic and detection sensor are considered as parts of a stationary information device).

But, Cyrus et al. do not expressly a first radio communication unit that performs a radio communication to detect approach of an external device, the first radio communication unit including a detecting unit that detects the approach of the external device based on a result of the radio communication by the first radio communication unit

Dort teaches a traffic control system that uses RFID system to detect approaching vehicles (Fig. 6A, paragraphs 0036, 0044).

Art Unit: 2618

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate using RFID system for detecting approaching vehicle taught by Dort into the stationary information device of Cyrus et al., in order to use radio communication for detection.

Regarding claim 23, Cyrus et al. and Dort teach the limitation of claim 22.

Cyrus et al. teach wherein the attraction force is an electromagnetic attraction force (column 2 lines 14-17).

Regarding claim 25, Cyrus et al. and Dort teach the limitation of claim 22.

Cyrus et al. teach wherein the first radio communication unit further includes a fixation determining unit that determines a completion of attracting and fixing the mobile terminal device with the attraction force (column 2 lines 3-17).

Regarding claim 26, Cyrus et al. and Dort teach the limitation of claim 22.

Dort teaches wherein the first radio communication unit is a radio-frequency-identification reader/writer (paragraph 0036).

4. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cyrus et al. (US Patent#6322415) in view of Dort (US2004/0260455) and Kaneyuki (US Patent#4679456).

Regarding claim 27, Cyrus et al. and Dort teach the limitation of claim 22.

Art Unit: 2618

But, Cyrus et al. and Dort do not expressly disclose further comprising an intensity adjusting unit that adjusts an intensity of the attraction force.

Kaneyuki teaches controlling brake of a vehicle by adjusting intensity of an electromagnet (column 5 lines 26-31), which would have been obvious to be utilized in the stationary information device of Cyrus et al. and Dort et al. in order to control speed of approaching toy vehicle.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate an adjusting unit to control intensity of attraction force taught by Kaneyuki into the stationary information device of Cyrus et al. and Dort et al., in order to control speed of approaching device.

***Allowable Subject Matter***

5. Claims 16-21 are allowed.

The following is an examiner's statement of reasons for allowance: No prior arts are found alone or obvious in combination to teach claims 16-27. Relevant prior arts found in search:

Anderson et al. (US Patent#4857851) teach using magnetically activated detector detects the presence of the approaching vehicle/pig inside a pipeline and sending a signal to switch on a transmitter unit. Yet, it is a magnetically activated detector with no radio communication requirement.

Cyrus et al. (US Patent#6322415) teach a toy vehicle electromagnetic guidance apparatus. Yet, there is no first and second radio communication utilized.

Art Unit: 2618

Dort (2004/0260455) teaches using RFID for checking traffic status. Yet, there is no attracting force involved.

Hilliard (US2004/0056778) teaches using RFID system to check on status of approaching vehicles. Yet, there is no attracting force involved.

Hoshina et al. (US Patent#7135975) teaches using RFID system to detect and track baggage. Yet, there is no attracting force involved between reader-writer device and contactless identification tag on baggage.

Letkomiller et al. (US2004/0155782) teach a stationary RFID interrogator detects and communicates with a RFID device equipped with a magnet inside an animal such as a cow. Yet, the stationary RFID interrogator does not have an attracting unit that generates an attracting force when approach detected.

Yamagiwa (US2006/0007003) teaches using an electromagnet to fix an IC tag inside a vehicle. Yet, there is no stationary information device involved.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Claim 24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.



*Conclusion*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZHIYU LU whose telephone number is (571)272-2837. The examiner can normally be reached on Weekdays: 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. L./  
Examiner, Art Unit 2618

/Nay A. Maung/  
Supervisory Patent Examiner, Art Unit  
2618

Zhiyu Lu  
September 9, 2008